Project Design Phase-II
Technology Stack (Architecture & Stack)

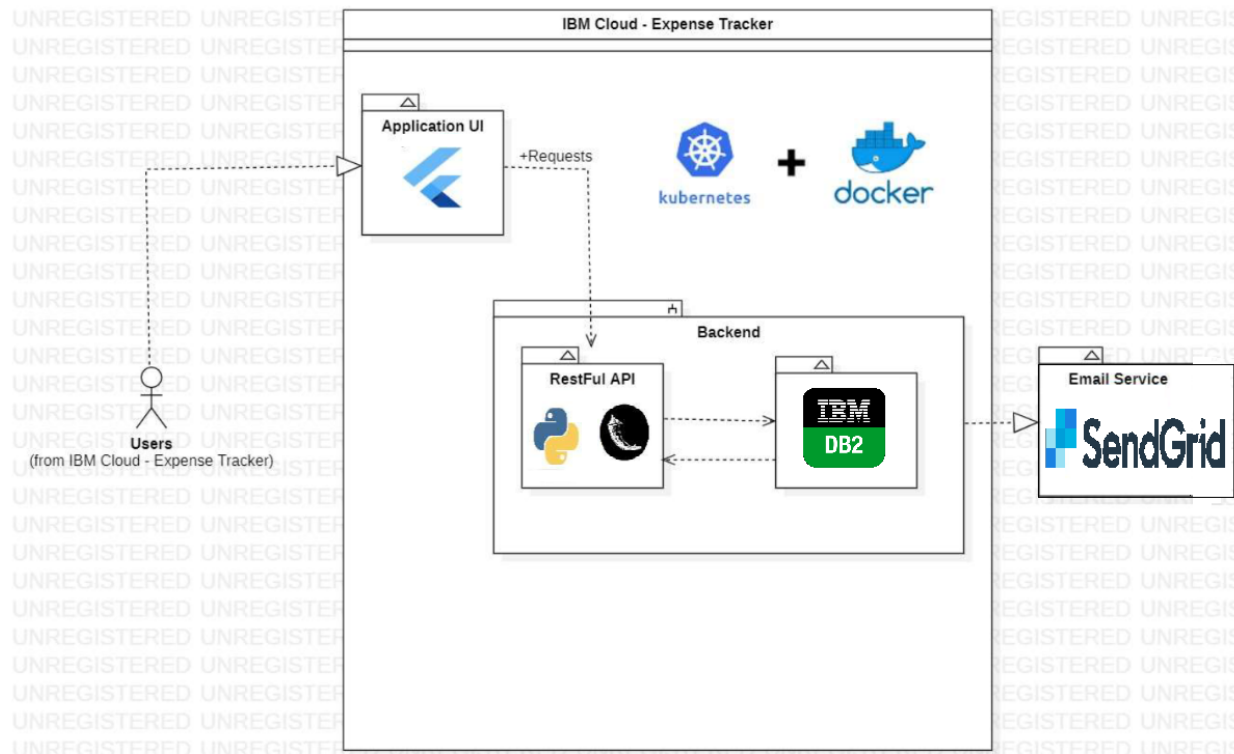| Date	03 October 2022
Team ID	PNT2022TMID53163
Project Name	Project - Personal Expense Tracker
Maximum Marks	4 Marks

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interface for accessing the features of the web app	Flutter
2.	Application Logic -Mail Service	Sending mail to a user in case of any important event	Sendgrid API
3.	Application Logic -Add and View Expenses	Users must be able to add new expenses while being able to delete ,update or view old ones.	Python: Flask
4.	Application Logic -Spending cap	Whenever the budget limit for a cycle is crossed, user must be notified.	Python: Flask
5.	Database	Data Type, Configurations etc.	IBM DB2
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Source Code of tools available to public	All tools used for development are open source by nature.

S.No	Characteristics	Description	Technology
2.	Security Implementations	Maintaining Data confidentiality and Authorization	Bcrypt for hashing and AES for encryption , HTTPS for overall security during transmission.
3.	Scalable Architecture	Use of microservices ensures scalability in business logic.	Flask- microservices architecture
4.	Availability	Cloud Application serves very well in Scalability and Availability.	Kubernetes for maintaining scalability in deployment.
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used